AMENDMENTS TO THE SPECIFICATION

Please replace the second full paragraph on page 4 with the following amended paragraph:

In the communications from NC apparatus to driving amplifiers using the data

transmission cable 70, the NC apparatus 61 as a master station transmits an arbitrary number of

communication frames 80 to destination driving amplifiers in an arbitrary time during a

communication cycle. A driving amplifier as a slave station constantly supervises the

communication frames 80 transmitted from the NC apparatus 61 via the receiving controller 78

shown in Fig. 20 and receives the communication frames destined for the driving amplifier.

Please replace the first full paragraph on page 5 with the following amended paragraph:

In Fig. 21(a) 21(b), a numeral 82 (82a-82e) represents communication frames transmitted

from the NC apparatus 61 to the remote I/O units 64, and 83 (83a-83e) communication frames

transmitted from the remote I/O units 64 to the NC apparatus 61. As shown in Fig. 19,

communications between NC apparatus and remote I/O units use a half-duplex communications

system where the data transmission cable 75 for communications between NC apparatus and

remote I/O units is shared by the NC apparatus 61 as a master station and a plurality of remote

I/O units 64 and data is transmitted based on time division of a communication cycle.

Please replace last paragraph on page 24 with the following amended paragraph:

When an alarm ALM is input (1) to the servo amplifier 2a, the servo amplifier 2a

executes alarm processing as well as appends an ALM bit to bit 0 of the emergency stop

information section 20 of a communication frame, then transmits (2) the frame to the NC

apparatus 1a (3). The NC apparatus 1a, in case an ALM bit is appended to the emergency stop

information section 20 of a received communication frame, appends (4) an EMG bit to bit 2 of

the emergency stop information section 20 of a communication frame to be transmitted (6) and

(7), in order to notify "occurrence of EMG." The servo amplifier 2a connected to the NC

apparatus 1a, in case an EMG bit is appended to the emergency stop information section 20 of a

received communication frame, performs emergency stop processing. While an example of

numerical control and servo amplifiers is shown in the figure, spindle amplifiers or remote I/O

units may be used instead of servo amplifiers.

Please replace the first full paragraph on page 26 with the following amended paragraph:

~~while~~ While a driving amplifier (servo amplifier, spindle amplifier) transmits data to the

NC apparatus once in a main cycle in the related art apparatus so that notice is made only once

per servo synchronization cycle, data is split into 16 pieces ~~ad~~ and each data piece is transmitted

once in a sub cycle (emergency stop information is also transmitted in this practice) in

Embodiment 1. This assures real-time conveyance of emergency stop information.

Please replace the first full paragraph on page 27 with the following amended paragraph:

Fig. 5 shows a structure of a communication frame used in communications between NC

systems according to Embodiment 2 of the invention. In the figure, numerals 21 through 23 are

same as those in Fig. 2 shown in Embodiment ~~2~~ 1 and corresponding description is omitted. A

numeral 24 represents GOFF system information for specifying a system to be gated off

allocated to bit 4 through bit 7 of the emergency stop information section 20.

Please replace the second paragraph on page 32 with the following amended paragraph:

In case the peripheral device has confirmed reception of the port connection confirmation command 30 at Port 1, the peripheral device promptly returns a response to a port connection confirmation command 31 from Port 1 to the NC apparatus as well as transmits the port connection confirmation command 30 from Port ~~1~~ 2 to downstream nodes in step S15.

Please replace the second paragraph on page 33 with the following amended paragraph:

In case the port information command 32 is received at Port 2, the peripheral device appends a code to the tail of the received port information command 32 in step S22 and transmits the resulting command from Port 1. Fig. ~~7(d)~~ 7(c) shows a state of the received port information command 32a where an I/O code 32b, a servo code 32c and a spindle code 32d are appended in the order to the remote I/O unit, servo amplifier, and spindle amplifier.

Please replace the second paragraph on page 34 with the following amended paragraph:

While in the foregoing example NC apparatus calculates a station address in step S8 in Fig. 8 and transmits node count data 33b and ~~office~~ station address data 33c as a node count notice command 33a to a peripheral device in step S9, the NC apparatus may transmit node count data 33b alone as a node count notice command 33a without calculating a station address and the peripheral device may calculate the station address based on the node count data 33b. In this case, it is necessary to transmit the calculated station address to the NC apparatus.

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Please replace the paragraph bridging pages 34-35 with the following amended paragraph:

Fig. 10 shows the processing in a peripheral device performed in case reception of a port

connection confirmation command 30 is confirmed at Port 2 in step S11 in Fig.~~11~~ 9. Steps S30

through S42 in Fig. 10 are the similar to steps S14 through S26 that branches in case reception of

a port connection confirmation command 30 is confirmed at Port 1 in the step S11, although the

role of Port 1 is opposite to that of Port 2.

Please amend the first paragraph on page 35 with the following amended paragraph:

In Embodiment 3, NC apparatus and peripheral devices that constitute an NC system

shown in Figs. 8 through 10 check the connection state of peripheral devices and set a~~an office~~

station address and a transmission timing in a communication cycle in time-division-based

communications in accordance with flowcharts shown in Figs. 8 through 10. This prevents a

setting error in setting IDs and omits cumbersome work and ID setup switches.

Please replace the first paragraph on page 43 with the following amended paragraph:

In case a communication frame received by a Port 1 receiving controller/Port ~~1~~ 2

receiving controller includes information related to emergency stop (Rx1-ALM/Rx2-ALM, Rx1-

GOFF/Rx2-GOFF, Rx1-EMG/Rx2-EMG), output processing such as ALM output, GOFF output

and EMG output is performed. The information related to emergency stop (Rx1-ALM/Rx2-

ALM, Rx1-GOFF/Rx2-GOFF, Rx1-EMG/Rx2-EMG) is latched (ALM1/ALM2,

GOFF1/GOFF2, EMG1/EMG2) and emergency stop information (Tx1-ALM/Tx2-ALM, Tx1-

GOFF/Tx2-GOFF, Tx1-EMG/Tx2-EMG) is appended to a communication frame to be

transmitted from the Port 1 transmission controller/Port 1 2 transmission controller, together with

information related to emergency stop such as ALM input, GOFF input and EMG input.